## REMARKS / ARGUMENTS

Enclosed with this amendment is a Change of Correspondence Address.

**Status of Claims**

Claims 1-9 are pending in the application and stand rejected. Applicant has canceled Claim 5, leaving Claims 1-4 and 6-9 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §112, first paragraph, and 35 U.S.C. §103(a), have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

**Objections to the Specification**

The Examiner objected to the specification under 35 U.S.C. §112, first paragraph, remarking that the "specification is replete with terms which are not clear, concise and exact." However, the Examiner specifically notes only one such area, which is absent a formula that is referred to on page 5.

Applicant traverses this objection for the following reasons.

Applicant has amended the specification as noted above to include the formula for $R(L_f)$. Support for this amendment may be found on page 6 of the foreign priority document to French Patent Application No. 01 00339, which has been incorporated in its entirety by reference into this application. No new matter has been added.

In view of this amendment, and the absence of any other specific areas of the specification that the Examiner objects to, Applicant respectfully submits that the specification now complies with 35 U.S.C. §112, first paragraph, and respectfully requests reconsideration and withdrawal of this objection.

**Objections to the Claims**

The Examiner objected to Claim 5 because it fails to further limit the subject matter of a previous claim.

Applicant has canceled Claim 5, thereby obviating this objection.

Accordingly, Applicant respectfully requests reconsideration and withdrawal of the objection.

**Rejections Under 35 U.S.C. §112, First Paragraph**

Claims 1-9 stand rejected under 35 U.S.C. §112, first paragraph, as failing to comply with the written description requirement. The Examiner alleges that the claims contain subject matter that was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Regarding Claims 1, 2, 6 and 7, the Examiner alleges that the specification is devoid of the necessary teachings.

Regarding Claims 2-5, and 7-9, the Examiner remarks that these claims are rejected as being dependent on a base claim.

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that where the specification contains a written description of the invention in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains to make and use the same, then such written description complies with 35 U.S.C. §112, first paragraph.

Regarding Claims 1 and 6

The Examiner alleges that the specification is devoid of teachings to carry out the element of "determining N autocorrelations..." of Claim 1, and the element of "means capable of carrying out for each row N autocorrelations..." of Claim 6.

Applicant respectfully disagrees.

Applicant has amended the specification as set forth above to include the formula for $R(L_i)$ that follows paragraph [0026]. No new matter has been added.

At paragraph [0026], Applicant describes generally how to determine each value of the autocorrelation vector of a row, and by way of the formula for $R(L_i)$, Applicant describes more precisely in mathematical terms how to determine each value of the autocorrelation vector of a row.

Accordingly, Applicant respectfully submits that the claims now contain subject matter that is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Regarding Claims 2 and 7

The Examiner alleges that the specification is devoid of teachings to carry out "The method of determining the associated pixels." Paper 12272001, page 4.

In respectful disagreement with the Examiner, Applicant submits that Claims 2 and 7 do not recite a "method for determining the associated pixels."

Applicant submits that Claims 2 and 7 recite, inter alia, "...the luminous intensity value of the elementary pixel being equal to the mean of the luminous intensity values respectively ***associated with*** the base pixels of the cell..."

Here, Applicant is not claiming a "method of determining the ***associated pixels***", but instead is claiming that the luminous intensity value of the elementary pixel is equal to the mean of the luminous intensity values that are ***associated, respectively, with*** the base pixels of the cell. Since each base pixel of a cell will have a luminous intensity, that particular luminous intensity will be ***associated with the respective base pixel*** of the cell.

Accordingly, Applicant respectfully submits that the claims contain subject matter that is described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention.

Dependent claims inherit all of the limitations of the respective parent claim and any intervening claim.

In view of the foregoing, Applicant respectfully submits that the specification provides general guidelines as to the scope of the invention such that one of ordinary skill

in the art would know what was meant, and that the subject matter of the invention has been described and is supported in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention, and therefore respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §112, first paragraph.

**Rejections Under 35 U.S.C. §103(a)**

Claims 1, 3, 5, 6, 8 and 9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Siczek et al. (U.S. Patent No. 5,526,394, hereinafter Siczek) in view of Osaki et al. (U.S. Patent No. 5,163,099, hereinafter Osaki) and further in view of Press et al. (NPL document, see PTO-892, hereinafter Press).

Regarding Claims 1 and 6, the Examiner acknowledges that Siczek does not expressly disclose the determining of N autocorrelations of the vector of luminous intensity values, performing the Fourier transform on the autocorrelation vector to obtain the energy frequency spectrum and comparing the energy value at the graduated marks with a threshold value, and looks to Osaki and Press to cure these deficiencies. Paper 12272001, pages 5-6.

Claims 2, 4 and 7 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Siczek in view of Osaki and further in view of Press as applied to Claim 1 above, and further in view of Baxes (NPL document, see PTO-892, hereinafter Baxes).

Regarding Claim 2, the Examiner acknowledges that Siczek, Osaki and Press, do not disclose the luminous intensity values of each pixel being equal to the mean of the luminous intensity values of pixels associated with the based pixel of the cell, and looks to Baxes to cure this deficiency. Paper 12272001, page 7.

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5

U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

Regarding Claims 1 and 6

In alleging obviousness, the Examiner alleges that Siczek teaches the detection of ***a compression paddle*** and method of acquiring a digital image, and the subdividing of the acquired digital image into row of N pixels with assigned luminous intensity values, and cites Siczek at reference numeral 50 on Fig. 2, and Col. 7 Lines 29-35, in support thereof. Paper 12272001, page 5 (emphasis added).

The Examiner further alleges that one can easily combine the teachings and perform the functions of Osaki via a new method, and the since Osaki's invention is not limited to one particular application, it would be applicable to detecting ***a graduated compression paddle*** and would be combinable with Siczek's invention. Paper 12272001, page 6 (emphasis added).

In respectful disagreement with the Examiner, Applicant finds Siczek, as cited by the Examiner, to teach a compression paddle 50, and a receiver 30 having an array 132 of pixels. Reference numerals 50 and 30 of Figure 2, reference numeral 132 of Figure 8, Col. 5 Line 60 through Col. 6 Line 9, and Col. 7 Lines 29-35.

As such, Applicant finds Siczek to be absent any teaching or suggestion of:

"A method of automatic detection of ***a graduated compression paddle*** comprising the steps of:

acquiring a base digital image containing ***the [graduated compression] paddle***, the base image being subdivided into rows of N elementary pixels respectively assigned luminous intensity values, the rows of elementary pixels all being ***parallel to a general direction of graduation of the paddle***;

...

comparing the energy value at the frequency of ***the graduated marks [of the graduated compression paddle]*** for each spectrum with a predetermined threshold value; and

detecting the ***[graduated compression] paddle.***"

Here, Applicant is not merely claiming a digital scan apparatus or an imaging apparatus that uses the Fourier transform of the autocorrelation, but instead is claiming a specific method and device for automatic detection of ***a graduated compression paddle.*** Applicant not only finds Siczek to be absent any teaching or suggestion of ***a graduated compression paddle, as claimed in the instant invention***, but also finds Osaki and Press to be absent any cure for this deficiency.

Absent a teaching or suggestion of each and every element of the claimed invention, the References cannot properly be combined to establish a prima facie case of obviousness.

Additionally, Applicant submits that paragraphs [0005] and [0029-0030] describe the problem addressed and solved by the instant invention and the benefits arrived at by implementing embodiments of the instant invention. Nowhere but in the instant application is the problem associated with the use of a graduated compression paddle in digital scan mammography recognized and solved. Accordingly, and while Osaki's invention may not limited to one particular application, the combination of Siczek, Osaki and Press, still lack any teaching of the use of a graduated compression paddle in digital scan mammography, and any teaching of a problem-solution associated therewith, and therfore cannot properly be combined to establish a prima facie case of obviousness.

Dependent claims inherit all of the limitations of the respective parent claim.

Regarding Claims 2, 4 and 7 More Specifically

The Examiner acknowledges deficiencies in Siczek, Osaki and Press, as set forth in the Office Action, and looks to Baxes to cure the deficiency of the luminous intensity values of each pixel being equal to the mean of the luminous intensity values of pixels associated with the base pixels of the cell (page 89, box filter). Paper 12272001, page 7.

Applicant respectfully submits that Claims 2, 4 and 7 depend from either Claim 1 or 6, and therefore inherit all of the limitations of the respective parent claim. Applicant further submits that Baxes fails to cure the deficiencies of Siczek, Osaki and Press, with

respect to at least the ***graduated compression paddle***, and therefore cannot properly be combined with Siczek, Osaki and Press to establish a prima facie case of obviousness.

In view of the foregoing, Applicant submits that the References fail to teach or suggest each and every element of the claimed invention and disclose a substantially different invention from the claimed invention, and therefore cannot properly be used to establish a prima facie case of obviousness. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

Furthermore, Applicant respectfully submits that an Examiner cannot establish obviousness by locating references which describe various aspects of a patent Applicant's invention without also providing evidence of the motivating force which would impel one skilled in the art to do what the patent Applicant has done. *Ex parte Levengood*, 28, USPQ2d 1300, 1302 (Bd.Pat.App.Int., 1993). References may not be combined indiscriminately. It is not enough for a valid rejection to view the prior art in retrospect once an Applicant's disclosure is known. The art applied should be viewed by itself to see if it fairly disclosed doing what an Applicant has done. *In re Skoll*, 187 USPQ 481, 484 (CCPA, 1975) (citing *In re Schaffer*, 108 USPQ 326, 328-29 (CCPA, 1956)). "The test for an implicit showing [of obviousness] is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved ***as a whole*** would have suggested to those of ordinary skill in the art." (Emphasis added). *In re Kotzab*, 217 F.3d 13645, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000).

As previously discussed, Applicant's invention solves a particular problem associated with the use of ***a graduated compression paddle*** in digital scan mammography, and nowhere in the cited references does Applicant find any teaching, suggestion or motivation to combine the references, which at the outset are ***absent the teaching of a graduated compression paddle***, to arrive at the claimed invention for the purpose of solving the described problem associated with ***a graduated compression paddle***.

Accordingly, Applicant submits that no motivation can be found in any of the References to combine the technologies of the References to arrive at the claimed invention, and that the Examiner has improperly combined the References since there is no evidence of a motivating force that would impel one skilled in the art to do what the patent Applicant has done. Accordingly, Applicant respectfully requests reconsideration and withdrawal of all rejections under 35 U.S.C. §103(a), which Applicant considers to be traversed.

In light of the forgoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. §112, first paragraph, and 35 U.S.C. §103(a), have been traversed, and respectfully requests that the Examiner reconsider and withdraw these rejections.

The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 50-2513.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above identified Deposit Account.

Respectfully submitted,

CANTOR COLBURN LLP
Applicant's Attorneys

By: _____

Jay L. Chaskin
Registration No: 24030
Customer No. 23413

Address: 55 Griffin Road South, Bloomfield, Connecticut 06002
Telephone: (860) 286-2929
Fax: (860) 286-0115